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AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning on page 6, line 7 with the following amended paragraph:

In a particular embodiment, the image forming layer includes a mixture of a novolak resin and a resole resin. An example of a suitable novolak resin is ~~Novolak~~ NOVOLAK N13 available from Eastman Kodak Company, Rochester, NY, and supplied as a 34 percent solution in acetone. An example of a suitable resole resin is UCAR BKS-5928 available from Union Carbide Corp., Danbury, CT.

Please replace the paragraph beginning on page 7, line 9 with the following amended paragraph:

After applying the coating mixture to the substrate, the applied coating mixture may be dried to form the image forming layer. Suitable methods of drying include air drying and heating. In one embodiment, the coating mixture may be dried at about 130 °C for between about 15 and 90 seconds in a ~~Mathis Labdryer~~ MATHIS LABDRYER oven, (Mathis, Switzerland).

Please replace the paragraph beginning on page 8, line 15 with the following amended paragraph:

Particular examples of suitable surfactants include the ~~Syrfinol~~ SYRFINOL series from Air Products, Allentown, PA, the ~~Zonyl~~ ZONYL series from DuPont, the ~~Fluorad~~ FLUORAD series from 3M and the ~~Aeroseal~~ AEROSOL series from Cyanamid. Suitable humectants may prevent the ink-jet nozzles reported below from clogging and/or drying out. Examples of suitable humectants include ethylene glycol and sorbitol. Suitable biocides include ~~Proxel~~ PROXEL GXL (supplied by Zeneca Corporation), ~~Kathion~~ KATHION X L (supplied by Rohm and Haas) and ~~Triclosan~~ TRICLOSAN (supplied by Ciba Specialty Chemicals). An example of a suitable viscosity builder is polyethylene glycol.

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Please replace the paragraph beginning on page 9, line 18 with the following amended paragraph:

Suitable ink-jet printers for imagewise application of the liquid mixture may depend on the particular carrier being used, and generally include the ~~JetPlate~~ JETPLATE ink-jet printer, available from Pisces-Print Imaging Sciences Inc., Nashua, NH, the ~~Xaarjet Evaluation Kit, Model No. XJ126R~~ XAARJET EVALUATION KIT MODEL NO. XJ126R supplied by Xaarjet, Cambridge, UK, the ~~Hewlett-Packard DeskJet~~ HEWLETT PACKARD DESKJET 970 CXI ink-jet printer, the ~~Hewlett-Packard~~ HEWLETT PACKARD 540C ink-jet printer, the ~~Epson Stylus Color~~ EPSON STYLUS COLOR 600 ink-jet printer, the ~~Epson~~ EPSON 740 ink-jet printer, the ~~Epson~~ EPSON 800 ink-jet printer, the ~~Epson Stylus Color~~ EPSON STYLUS COLOR 900 ink-jet printer, the ~~Epson Stylus~~ EPSON STYLUS PRO9600 ink-jet printer and the ~~Epson Stylus Color~~ EPSON STYLUS COLOR 3000 ink-jet printer.

Please replace the paragraph beginning on page 9, line 26 with the following amended paragraph:

After imagewise applying the catalyst, the image forming layer may be optionally air dried for several minutes. The printing plate precursor may then be subjected to a heat treatment step at between about 20 and about 200 °C, more particularly between about 75 and about 150 °C, even more particularly between about 90 and about 130 °C. The heat treatment step may be performed for between about 30 and 300 seconds, more particularly between about 60 and about 120 seconds. A suitable heat source is a heavy duty ~~Wisconsin~~ WISCONSIN oven having a conveyor speed of about 2.5 feet/min and an operating temperature of about 126 °C. ~~Wisconsin~~ WISCONSIN ovens are available from Wisconsin Oven Corporation, East Troy, WI.

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Please replace the paragraph beginning on page 10, line 23 with the following amended paragraph:

Example 1

A coating mixture including the components reported in Table 1 below and a 1-methoxypropan-2-ol solvent was coated via a wire wound bar onto a plurality of 0.3 gauge, aluminum substrates, which had been electrograined, anodized with sulfuric acid and treated with a polyvinylphosphonic acid solution. The formulation concentration was selected to form a dry coating having a weight of 1.5 g/m². The coating was dried at 130 °C for 90 seconds in a ~~Mathis Labdryer~~ MATHIS LABDRYER oven to produce a blue image forming layer.

Please replace the paragraph beginning on page 11, line 22 with the following amended paragraph:

BYK 307 is a polyethoxylated dimethylpolysiloxane copolymer surfactant available from Byk chemie, Wallingford, CT. The Resole resin is UCAR BKS-5928 available from Union Carbide Corp., Danbury, CT. The Novolak resin is N13 ~~Novolak~~ NOVOLAK resin available from Eastman Kodak Company, Rochester, NY.

Please replace the paragraph beginning on page 14, line 1 with the following amended paragraph:

In a separate step, HMF S (1 g, pKa = 2.5), a 3-benzoyl-4-hydroxy-6-methoxybenzenesulfonic acid available from Aldrich Chemical, and ~~Lodyne~~ LODYNE 103A (0.01 g), a fluoro surfactant available from Ciba Specialty Chemicals, Tarrytown, NY were dissolved in water (8.99 g) to form a liquid mixture. After the solids had thoroughly dissolved, the solution was applied to the image forming layer using a cotton-tipped applicator swab. The image forming layer was air dried for 5 minutes, and then placed in a heavy duty Wisconsin oven (conveyor speed = 2.5 feet/min) having an operating temperature of 126 °C for approximately 90 seconds.

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Please replace the paragraph beginning on page 14, line 18 with the following amended paragraph:

Example 2

A printing plate was formed according to Example 1 except that the plate was not air-dried prior to being placed in the ~~Wisconsin~~ WISCONSIN oven. A similar image area was formed after development.

Please replace the paragraph beginning on page 13, line 2 with the following amended paragraph:

Example 5

A printing plate was formed according to Example 1 except that bromoacetic acid (1.0 g; pKa = 2.9) was substituted for HMBS. After immersion in the developer, an image area was produced. The resulting printing plate was then evaluated on an AB Dick DICK duplicator press (AB Dick, Niles, IL) loaded with ~~Van Son Rubberbase~~ VAN SON RUBBERBASE ink and ~~Var~~ VARN 142W fountain solution at a concentration of 3 oz/gallon water and ~~Var~~ VARN alcohol replacement at a concentration of 3 oz/gallon water. The image area was able to uptake ink and to transfer the inked image to paper to produce at least 275 impressions.

Please replace the paragraph beginning on page 14, line 1 with the following amended paragraph:

Example 9

Bromoacetic acid (1.0 g) and ~~Lodyne~~ LODYNE 103A (0.01 g) were dissolved in water (8.99 g) to form a liquid mixture. Once the solids dissolved, the resulting solution was decanted into the storage vessel of a ~~JetPlate~~ JETPLATE ink-jet printer. The ~~JetPlate~~ JETPLATE printer includes a PC controlled imaging output device, an imaging head, and a signal encoder that controls the imaging head. The printer resolution was set at 710 x 1440 dpi + EDS screening without calibration, and Media Type was set to paper. A printing plate precursor formed according to Example 1 was placed on the ~~platten~~ platen and ink-jet application of the acidic mixture was initiated.

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Please replace the paragraph beginning on page 14, line 10 with the following amended paragraph:

The portions of the image forming layer that passed under the imaging head exhibited a clear and accurate copy of the desired test image. The image was air dried for 5 minutes, and was then placed in a heavy duty ~~Wisconsin~~ WISCONSIN oven (conveyor speed = 2.5 feet/min) having an operating temperature of 126 °C for about 90 seconds. The printing plate precursor was then developed by immersion in MX1813 developer for 30 seconds at 20 °C with gentle agitation. The portions of the image forming layer that were contacted with the liquid mixture resisted development. Non-contacted portions of the image forming layer were removed to produce an image area. The resulting printing plate was then mounted on the AB ~~Dick~~ DICK duplicator press for evaluation. The image area was able to uptake ink and to transfer the ink to paper to produce at least 275 impressions.

Please replace the paragraph beginning on page 14, line 26 with the following amended paragraph:

Example 11

A coating mixture including the components reported in Table 2 below and a 1-methoxypropan-2-ol solvent was coated via a wire wound bar onto a plurality of 0.3 gauge, aluminum substrates, which had been electrograined, anodized with sulfuric acid and treated with a polyvinylphosphonic acid solution. The formulation concentration was selected to form a dry coating having a weight of 0.9 g/m². The coating was dried at 130 °C for 90 seconds in a ~~Mathis Labdryer~~ MATHIS LABDRYER oven to produce a blue image forming layer.

Please replace the paragraph beginning on page 15, line 18 with the following amended paragraph:

Example 12

A printing plate was formed according to Example 11 except that a mixture of bromoacetic acid (0.5 g), ~~acid-violet~~ ACID VIOLET 7 (0.15 g), available from Aldrich Chemical, and water (4.35 g) was substituted for the HMBS solution. The image area remaining after development was purple in color.

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Please replace the paragraph beginning on page 16, line 6 with the following amended paragraph:

Example 14

A printing plate was formed according to Example 11 except that a mixture of p-toluene sulfonic acid (0.5 g), acid-violet ACID VIOLET 7 (0.15 g) and water (4.35 g) was substituted for the HMBS solution. The image area remaining after development was blue in color.

Please replace the paragraph beginning on page 16, line 22 with the following amended paragraph:

Example 17

HMBS (6.0 g) was dissolved in acetone (2.16 g) and 1-methoxypropan-2-ol (24.84 g) to form the liquid mixture. Once the solids dissolved, the resulting solution was decanted into the syringe system that supplies a Xaarjet XAARJET ink-jet printer system, available from Xaar PLC, Cambridge UK. The Xaarjet XAARJET printer system includes a PC controlled imaging output device, an imaging head and a signal encoder that controls the imaging head. The movement of the ~~platen~~ platen, which supports the substrate to be imaged, activates the imaging head. The fire frequency was set at 5 Hz with an external trigger and the image control was set at External SE. The head was primed prior to imaging to ensure that the acid mixture was continuous through the imaging head. The printing plate precursor formed according to Example 11 was placed on the ~~platen~~ platen and ink-jet application of the liquid mixture was initiated.

Please replace the paragraph beginning on page 17, line 4 with the following amended paragraph:

The portions of the image forming layer that passed under the imaging head exhibited a clear and accurate copy of the desired test pattern. The image forming layer was air dried for 5 minutes, and then placed in a heavy duty ~~Wisconsin~~ WISCONSIN oven (conveyor speed = 2.5 feet/min) at an operating temperature of 126 °C for approximately 90 seconds. The printing plate precursor was then developed by immersion in MX1813 developer for 30 seconds at 20 °C with gentle agitation. The portions of the image forming

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layer that were in contact with the liquid mixture resisted development. Non-contacted portions of the image forming layer were removed to produce an image area. The resulting printing plate was then mounted on the AB Dick DICK duplicator press for evaluation. The image area was able to uptake ink and to transfer the ink to paper to produce at least 250 impressions.